

Application No.: 10/054,755
Filed: November 12, 2001
Reply to Office Action of January 24, 2004

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Original) A rotary pump comprising:
 - a main casing;
 - a casing cover cooperated with said main casing for defining a pumping chamber therebetween;
 - a pair of rotors received within said pumping chamber with mutually meshing pumping segments for synchronous revolution in mutually opposite directions;
 - a space being defined in one portion of said casing cover;
 - a cover piston being disposed within said space for movement back and forth with respect to an end surface of said rotor;
 - an air cylinder being mounted on said casing cover and having a piston rod, to which said cover piston is connected.

2. (Currently Amended) A rotary pump comprising:
 - a main casing;
 - a casing cover cooperated with said main casing for defining a pumping chamber therebetween;
 - a pair of rotors received within said pumping chamber with mutually meshing pumping segments for synchronous revolution in mutually opposite directions;
 - a space being defined in one portion of said casing cover;
 - a cover piston being disposed within said space for movement back and forth with respect to an end surface of said rotor;
 - a lock cylinder having a lock bolt being mounted on said casing cover for restricting movement of said cover piston by means of said lock bolt.

Application No.: 10/054,755

Filed: November 12, 2001

Reply to Office Action of January 24, 2004

3. (Currently Amended) A rotary pump comprising:

a main casing;

a casing cover cooperated with said main casing for defining a pumping chamber therebetween;

a pair of rotors received within said pumping chamber with mutually meshing pumping segments for synchronous revolution in mutually opposite directions;

a space being defined in one portion of said casing cover;

a cover piston being disposed within said space for movement back and forth with respect to an end surface of said rotor;

an air cylinder being mounted on said casing cover and having a piston rod;

a lock cylinder having a lock bolt being mounted on said air cylinder;

said cover piston being connected to ~~a piston rod projected from~~ one end surface of said piston rod of said air cylinder;

~~a piston rod projecting from~~ the other end surface of said piston rod of said air cylinder being abutted to said lock bolt for restricting movement of said cover piston by ~~means of~~ said lock bolt.

4. (Previously Presented) A rotary pump comprising:

a main casing;

a casing cover cooperated with said main casing for defining a pumping chamber therebetween;

a pair of rotors received within said pumping chamber with mutually meshing pumping segments for synchronous revolution in mutually opposite directions;

a space being defined in one portion of said casing cover;

a cover piston being disposed within said space for movement back and forth with respect to an end surface of said rotor;

a plurality of air cylinders being mounted on said casing cover in a condition where piston rods thereof are connected with each other, and said cover piston is connected to a piston rod;

Application No.: 10/054,755
Filed: November 12, 2001
Reply to Office Action of January 24, 2004

and having a piston rod, to which said cover piston is connected.

5. (Previously Presented) A rotary pump comprising:

a main casing;

a casing cover cooperated with said main casing for defining a pumping chamber therebetween;

a pair of rotors received within said pumping chamber with mutually meshing pumping segments for synchronous revolution in mutually opposite directions;

a space being defined in one portion of said casing cover; a cover piston being disposed within said space for movement back and forth with respect to an end surface of said rotor;

a plurality of air cylinders being mounted on said casing cover in a condition where piston rods thereof are connected with each other, and said cover piston is connected to a piston rod;

and having a piston rod, to which said cover piston is connected;

a lock bolt being coaxially provided on said air cylinder at the rearmost position, and said cover piston being connected to said piston rod of said air cylinder at the most front side;

a piston or a piston rod of said air cylinder at the rearmost position being in contact with said lock bolt for restricting movement of said cover piston by said lock bolt.